

## ABSTRACT OF THE INVENTION

A light-emitting device and a method for manufacturing the same are described, by forming a  $\text{SiN}/\text{Al}_{1-x-y}\text{In}_x\text{Ga}_y\text{N}$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ,  $x+y \leq 1$ ) superlattice layer  
5 between a substrate and an undoped GaN as a buffer layer, so as to reduce dislocation density of the buffer layer. In the  $\text{SiN}/\text{Al}_{1-x-y}\text{In}_x\text{Ga}_y\text{N}$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ,  $x+y \leq 1$ ) superlattice layer,  $\text{Al}_{1-x-y}\text{In}_x\text{Ga}_y\text{N}$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ,  $x+y \leq 1$ ) can be n-type, p-type or undoped.